Academic and social-emotional interventions in response to Covid-19 school closures.

Gulliford, Anthea

License:
Unspecified

Document Version
Publisher's PDF, also known as Version of record

Citation for published version (Harvard):
Gulliford, A 2020, *Academic and social-emotional interventions in response to Covid-19 school closures.* UCL Centre For Education Policy & Equalising Opportunities., UCL CEPEO.

Link to publication on Research at Birmingham portal

Briefing note Academic and social and emotional interventions in response to Covid-19 school closures

Prepared by Laura Outhwaite and Anthea Gulliford

Key Points

- Small group and one-to-one instruction are the most effective forms of academic intervention post-lockdown. This will be the best way to support at-risk children and young people in the return to school and mitigate the negative effects of the Covid-19 pandemic on academic achievement.

- Social and emotional learning is key. This includes play-based approaches, particularly for younger children. It improves students' wellbeing, their sense of belonging, and, in turn, their academic outcomes.

- Support for the most vulnerable children and young people will also need to involve external professionals, such as educational psychologists.

Recommendations

School leaders:

- Implement universal approaches for community rebuilding during and following the post-lockdown transition period.
- Prioritise social and emotional learning alongside other academic skills.

Policy makers:

- Support schools with pupil premium-type funds to enable access to effective targeted academic and social and emotional intervention resources.
- Enable schools to access specialist educational psychologist support, especially for children who are significantly at risk of psycho-social difficulties.

The Issue

Since 23rd March 2020, UK schools have been closed for most children, due to the COVID-19 pandemic. Schools are unlikely to re-open to the majority of pupils before September, meaning some will be out of school for more than six months. As school relationships serve as a buffer against psycho-social risks and against the risk of low academic attainment, particularly for children of low-income families (Masten and Barnes, 2018), the vulnerabilities of many children may have significantly increased as a consequence of the school closures.

Research suggests that long absences from school are likely to have a negative effect on academic achievement and increase achievement gaps (see Sims, 2020). Inequalities in resources and time available to families to spend on home schooling is likely to exacerbate existing achievement gaps (see Dickson & Macmillan, 2020; Outhwaite, 2020). There may also be significant challenges to mental health and wellbeing in schools after lockdown (Lee, 2020). Children and young people have been away from the community and structure that school provides. Some may carry personal losses, and some may have experienced significant stressors in the family. Mental health and wellbeing are fundamental to learning and development (Panayiotou et al., 2019), and therefore must be prioritised in the post-lockdown transition and beyond.

This briefing note summarises the empirical evidence on approaches to closing achievement gaps and supporting the most vulnerable children in academic, and social and emotional learning as schools can safely re-open.

Academic and Socio-Emotional Learning

Key learning areas including reading, mathematics, and socio-emotional skills are strong predictors of later academic achievement (Duncan et al., 2007; Taylor et al., 2017), as well as of economic, employment, mental and physical health outcomes in adulthood (Goodman et al., 2015; Reyna et al., 2009). Children and young people may be vulnerable to difficulties in these areas for a variety of reasons. For example, children and young people from low socio-economic backgrounds, those with special educational needs, those in care, and those with low proficiency in English, are more likely to face academic difficulties relative to their not-at-risk peers (Children's Commissioner, 2019; Strand et al., 2015; Strand and Hesell, 2018; Sullivan et al., 2013). Adverse events, environments, and family stressors in childhood are also associated with increased academic and developmental risk (Blodgett and Lanigan, 2018; Mayer, 2002). While children may face risk throughout their academic careers (Dietrichson et al., 2020), they can be protected by positive psycho-social environments provided by the school (Masten and Barnes, 2018). To tackle academic achievement gaps, it is important to have effective instructional and social-emotional practices and interventions available across all age groups and skill areas.

Socio-emotional learning encompasses children and young people's ability "to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (Hagarty and Morgan, 2019). Research shows socio-emotional skills are associated with better mental health outcomes in childhood, including wellbeing, coping with emotional distress, and lower internalised symptoms of anxiety and depression (Durlak et al., 2011; Goodman et al., 2015). Socio-emotional skills are also positively associated with academic outcomes (Wigelsworth et al., 2020) and with a sense of school belonging, which itself has significant positive associations with academic outcomes (Panayiotou et al., 2019).

Characteristics of Effective Interventions

For academic achievement, small group instruction (e.g. groups of 3-5 pupils) and one-to-one tutoring were consistently found to be the most effective form of targeted intervention for boosting reading and mathematics attainment of at-risk children aged 4-19 years

across three systematic reviews and meta-analyses (Dietrichson et al., 2011; Dietrichson et al., 2020; Nelson and McMaster, 2019). These studies considered children at-risk of learning vulnerabilities based on their low-socio-economic status and special educational needs. They also found significant benefits associated with interventions that incorporated feedback and progress monitoring (Dietrichson et al., 2017; Dietrichson et al., 2020), mixed ability groupings for mathematics with young children aged 4-8 years (Nelson and McMaster, 2019), and peer assisted learning with older children aged 12-19 years (Dietrichson et al., 2020). In contrast, peer assisted learning was found to be the least beneficial for young, at-risk children (Nelson and McMaster, 2019). Computer assisted instruction and incentive interventions also showed less beneficial impacts compared to small group instruction in closing the achievement gap in reading and mathematics between at-risk and not-at-risk students aged 12-19 years (Dietrichson et al., 2020).

For social and emotional learning, Durlak et al. (2011) examined 213 studies focused on typically developing children aged 5-18 years. Results showed socio-emotional learning interventions, which were sequential, active, focused, and explicit, had significant benefits for socio-emotional skills targeted by the interventions, as well improving academic outcomes. These positive effects remained statistically significant for a minimum of six months after the intervention, even if the size of the effect reduced marginally during the follow-up period when the intervention had stopped. Similarly, across 12 studies, Hagarty and Morgan (2020) found play-based and social skill programmes were beneficial for children with learning disabilities. This evidence emphasises the importance of play within the educational experiences of children and young people (Hirsh-Pasek et al., 2009). Wigelsworth et al. (2020) detail the specific activities that teachers can confidently use to promote socio-emotional learning.

Many layers of influence affect children's academic achievement and socio-emotional wellbeing (Bronfenbrenner, 1979) and the interventions listed so far may not be enough to ensure the necessary support for the most vulnerable children and young people. Educational psychologists can play a vital role in providing this support through offering guidance on the transition back to school, advising schools on implementing targeted provision (Atkinson et al., 2014), and conducting specialist work with individuals at greatest risk (Zafeiriou and Gulliford, In Press).

Costs of Effective Interventions

Investing in effective early intervention has long-term economic advantages in terms of costs savings on later public spending (Doyle et al., 2007). It is estimated that nearly £17 billion per year is spent by the state in England and Wales on late intervention, including access to acute or statutory services and welfare benefits, as a consequence of adverse childhoods (Chowdry and Fitzsimons, 2016). Other estimates suggest educational underachievement costs the UK economy £18 billion a year (McNally and Telhaj, 2007).

Effective, evidence-based interventions in reading, mathematics, and socio-emotional skills across age groups are summarised in the Teaching and Learning and Early Years Toolkits and Guidance Reports by the Education Endowment Foundation. Importantly, these resources also provide information about the costs per pupil for each intervention evaluated and the implementation logistics required. This can help teachers and school leaders make informed decisions about what is right for their children and young people within their school context (Higgins et al., 2018).

To facilitate academic and social-emotional learning for children and young people following the pandemic, schools need to have access to appropriate financial and non-financial resources. Many effective interventions, especially small group instruction will require teaching assistants (TAs). Research shows that well-trained TAs can play a valuable role in children's educational environments (Sharples, Blatchford and Webster, 2016; Inns et al., 2019) and will be especially vital as schools re-open. Access to one-to-one tutoring could

also be increased through the proposals to designed to mobilise university students to tutor disadvantaged pupils in English and mathematics (Action Tutoring, 2020; Elliot Major, Tyers, and Chu, 2020). For those most vulnerable, there is evidence that targeted group social and emotional learning interventions provided by professionals external to the school are more effective (Stallard, 2010). Policy makers should therefore consider providing funds for such purposes and making educational psychology and other mental health services available to schools.

Summary and Implications

Overall, schools and related educational services play a vital role in supporting children and young people's academic and social and emotional learning. We need well-resourced and sustained interventions that can help prevent later health and economic issues for our children and young people as they continue to develop through the experience of this pandemic.

For academic achievement, one-to-one and small group instruction (e.g. 3-5 students) are consistently found to be effective forms of intervention to support catch-up in reading and mathematics. Pupils' socio-emotional learning should also be prioritised, as part of a whole school, post-COVID transition process involving staff and parent liaison, and through specific socio-emotional interventions. Play-based approaches should be valued as part of this targeted curriculum provision.

Based on the summarised evidence, this briefing note recommends that socio-emotional learning for children of all ages is prioritised alongside academic achievement in reading and mathematics, as schools safely re-open. Policy makers should ensure that schools have access to adequate funds, intervention resources, and further professional support through educational psychologists to help support their most vulnerable children and young people.

References

Action Tutoring. (2020). *Action Tutoring joins forces in online tutoring pilot to reach disadvantaged pupils.* Available from: https://actiontutoring.org.uk/policy_update/action-tutoring-joins-forces-in-online-tutoring-pilot-to-reach-disadvantaged-pupils/

Atkinson, C., Squires, G., Bragg, J., Muscutt, J., & Wasilewski, D. (2014). Facilitators and barriers to the provision of therapeutic interventions by school psychologists. *School Psychology International, 35*(4), 384-397.

Blodgett, C., & Lanigan, J. D. (2018). The association between adverse childhood experience (ACE) and school success in elementary school children. *School Psychology Quarterly, 33*(1), 137.

Bronfenbrenner, U. (1979). *The ecology of human development.* Harvard university press.

Children's Commissioner's Office. (2019). *Briefing: the children leaving school with nothing.* Available from: https://www.childrenscommissioner.gov.uk/2019/09/20/almost-one-in-five-children-left-education-at-18-last-year-without-basic-qualifications/

Chowdry, H., & Fitzsimons, P. (2016). *The cost of late intervention: EIF analysis 2016.* Available from: https://www.eif.org.uk/report/the-cost-of-late-intervention-eif-analysis-2016

Dickson, M., & Macmillan, L. (2020). *Inequality in Access to Grammar Schools.* CEPEO Briefing Note 20-03. Available from: https://econpapers.repec.org/paper/uclcepeob/3.htm

Dietrichson, J., Bøg, M., Filges, T., & Klint Jørgensen, A. M. (2017). Academic interventions for elementary and middle school students with low socioeconomic status: A systematic review and meta-analysis. *Review of Educational Research, 87*(2), 243-282.

Dietrichson, J., Filges, T., Klokker, R. H., Viinholt, B. C., Bøg, M., & Jensen, U. H. (2020). Targeted school-based interventions for improving reading and mathematics for students with, or at risk of, academic difficulties in Grades 7–12: A systematic review. *Campbell Systematic Reviews, 16*(2), doi:10.1002/cl2.1081.

Doyle, O., Tremblay, R. E., Harmon, C., & Heckman, J. J. (2007). *Early childhood intervention: rationale, timing, and efficacy.* Available from: https://researchrepository.ucd.ie/bitstream/10197/546/3/doyleo_workpap_001.pdf

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., ... & Sexton, H. (2007). School readiness and later achievement. *Developmental Psychology, 43*(6), 1428-1446.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432.

Elliot Major, L., Tyers, M., & Chu, R. (2020). *The National Tutoring Service: Levelling-up education's playing field.* Available from: https://www.exeter.ac.uk/media/universityofexeter/collegeofsocialsciencesandinternationalstudies/education/documentsfordownload/National_Tutoring_Service_April_2020.pdf

Goodman, A., Joshi, H., Nasim, B., & Tyler, C. (2015). *Social and emotional skills in childhood and their long-term effects on adult life.* Available from:

https://www.eif.org.uk/report/social-and-emotional-skills-in-childhood-and-their-long-term-effects-on-adult-life

Hagarty, I., & Morgan, G. (2020). Social-emotional learning for children with learning disabilities: a systematic review. *Educational Psychology in Practice*, 1-15.

Higgins, S., Elliot-Major, L., Coleman, R., Katsipataki, M., Henderson, P., Mason, D., Aguilera, A. B. V., & Kay, J. (2018). *Sutton Trust- Education Endowment Foundation Teaching and Learning Toolkit.* Available from: https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/

Hirsh-Pasek, K., Golinkoff, R. M., Berk, L. E., & Singer, D. (2009). *A mandate for playful learning in preschool: Applying the scientific evidence.* Oxford University Press.

Inns, A., Lake, C., Pellegrini, M., & Slavin, R. (2019). Effective programs for struggling readers: A best-evidence synthesis. In *annual meeting of the Society for Research on Educational Effectiveness, Washington, DC.* Available from: http://www.bestevidence.org/word/strug_read_April_2019_full.pdf

Lee, J. (2020). Mental health effects of school closures during COVID-19. *Lancet Child Adolescent Health*, doi:10.1016/S2352-4642(20)30109-7.

Masten, A. S., & Barnes, A. J. (2018). Resilience in children: Developmental perspectives. *Children, 5*(7), 98; doi: 10.3390/children5070098.

Mayer, S. (2002). *The Influence of Parental Income on Children's Outcomes.* Available from: https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influence-parental-income/influence-of-parental-income.pdf

McNally, S. & Telhaj, S. (2007). *The cost of exclusion: counting the cost of youth disadvantage in the UK.* Available from: https://intouniversity.org/sites/all/files/userfiles/files/Prince's%20Trust%20Cost%20of%20youth%20exclusion.pdf

Nelson, G., & McMaster, K. L. (2019). The effects of early numeracy interventions for students in preschool and early elementary: A meta-analysis. *Journal of Educational Psychology, 111*(6), 1001-1022.

Outhwaite, L. (2020). *Inequalities in Resources in the Home Learning Environment.* CEPEO Briefing Note 20-02. Available from: https://econpapers.repec.org/paper/uclcepeob/2.htm

Panayiotou, M., Humphrey, N., & Wigelsworth, M. (2019). An empirical basis for linking social and emotional learning to academic performance. *Contemporary Educational Psychology, 56*, 193-204.

Reyna, V. F., Nelson, W. L., Han, P. K., & Dieckmann, N. F. (2009). How numeracy influences risk comprehension and medical decision making. *Psychological Bulletin, 135*, 943–973.

Sharples, J., Blatchford, P., & Webster, R. (2016). *Making best use of teaching assistants.* Available from: https://educationendowmentfoundation.org.uk/public/files/Publications/Teaching_Assistants/TA_Guidance_Report_MakingBestUseOfTeachingAssistants-Printable.pdf.

Sims, S. (2020). *School Absences and Pupil Achievement. CEPEO Briefing Note 20-01.* Available from: https://econpapers.repec.org/paper/uclcepeob/1.htm

Stallard, P. (2010). Mental health prevention in UK classrooms: The FRIENDS anxiety prevention programme.

Emotional and Behavioural Difficulties, 15*(1), 23-35.

Strand, S., & Hessel, A. (2018). *English as an Additional Language, proficiency in English and pupils' educational achievement: An analysis of Local Authority data.* Available from: www.bell-foundation.org.uk

Strand, S., Malmberg, L., & Hall, J. (2015). *English as an Additional Language (EAL) and educational achievement in England: An analysis of the National Pupil Database.* Available from: https://ore.exeter.ac.uk/repository/bitstream/handle/10871/23323/EAL_and_educational_achievement2.pdf?sequence=1

Sullivan, A., Ketende, S., & Joshi, H. (2013). Social class and inequalities in early cognitive scores. *Sociology, 47*(6), 1187- 1206

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development, 88*(4), 1156–1171.

Wigelsworth, M., Verity, L., Mason, C., Humphrey, M., Qualter, P., & Troncoso, P. (2020). *Programmes to Practices: Identifying effective, evidence-based social and emotional learning strategies for teachers and schools: Evidence review.* Available from: https://educationendowmentfoundation.org.uk/public/files/Social_and_Emotional_Learning_Evidence_Review.pdf

Zafeiriou, M.E. & Gulliford, A. (in press). A grounded theory of educational psychologists' mental health casework in schools: connection, direction and reconstruction through consultation. *Educational Psychology in Practice.*

Image credits

Front and back: UCL Imagestore.

.